

Claims

1. A hot plate wherein a resistance element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed on an insulating substrate.
2. The hot plate according to claim 1, wherein the thickness dispersion of the resistance element is $\pm 1 \mu\text{m}$ or less.
3. The hot plate according to claim 1 or 2, wherein the thickness of said resistance element is from 0.5 to 500 μm .
4. The hot plate according to claim 3, wherein the thickness of said resistance element is from 1 to 10 μm .
5. The hot plate according to any of claims 1 to 4, wherein said insulating substrate is at least one kind selected from a nitride ceramic, a carbide ceramic and a resin.
6. The hot plate according to any of claims 1 to 5, wherein said resistance element is made of scaly noble metal powder.
7. The hot plate according to any of claims 1 to 6, characterized in that said resistance element has a multilayer structure, and among a plurality of layers constituting said resistance element, the layer nearest to the substrate is made of titanium or chromium.
8. The hot plate according to any of claims 1 to 7, characterized in that said resistance element is composed of a first layer made of titanium; a second layer made of molybdenum and having a larger thickness than said first layer, on said first layer; and a third layer made of nickel and having an intermediate thickness between the thickness of said first layer and that of said second layer, on said second layer.

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9. The hot plate according to any of claims 1 to 8,
characterized in that said resistance element is composed of
a titanium layer having a thickness of 0.1 to 0.5 μm , a molybdenum
5 layer having a thickness of 0.5 to 7.0 μm , on said titanium layer,
and a nickel layer having a thickness of 0.4 to 2.5 μm , on said
molybdenum layer.

10. A process for producing a hot plate wherein a resistance
10 element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed
on an insulating substrate,

characterized by forming said resistance element by a
film-depositing method based on a dry process.

15 11. A process for producing a hot plate wherein a resistance
element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed
on an insulating substrate,

characterized by forming said resistance element by RF
sputtering.

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12. A process for producing a hot plate wherein a resistance
element having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed
on an insulating substrate,

25 characterized by printing a resistance element paste made
of scaly noble metal powder and firing the paste.

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